

REMARKS

Claims 1-3, 5-8 and 10-21 are all the claims pending in the application.

I. Formal Matters

Again, Applicants note that the Examiner crossed off JP10-195237 on the Form PTO-1449 in the Information Disclosure Statement (IDS) filed September 22, 1999.

Applicants' respectfully submit that JP10-195237 was enclosed with the IDS (note the attached date stamped filing receipt indicating submission of all 19 references). However, for the convenience of the Examiner, enclosed herewith is another copy of JP10-195237. The Examiner is requested to acknowledged and consider JP10-195237. Additionally, for the convenience of the Examiner, also enclosed is a PTO Form SB/08 (Form 1449 replacement) listing JP10-195237.

The Examiner is requested to acknowledged and consider JP10-195237.

II. The Rejection Under 35 U.S.C. §112, First Paragraph

Claim 17 is rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Examiner states that claim 17 "is purely dependent upon the property limitations" and that the "specification does not support patentability of claims

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solely dependent upon a property and the claims are not commensurate in scope with the enabling disclosure of the specification.”

Applicants respectfully submit that the present specification provides a fully enabling disclosure for the invention, as claimed, and that the disclosure would enable one of ordinary skill in the art to make and use the invention, as claimed, without undue experimentation. Applicants request that the Examiner reconsider and withdraw the §112, first paragraph, rejection in view of the following remarks.

The Examiner’s position remains identical to that set forth in the first Office Action.

Additionally, the Examiner has not provided any response to Applicants’ arguments as set forth in Section II of the Amendment dated March 22, 2001. The PTO bears an initial burden of setting forth a reasonable explanation as to why it believes that the scope of protection provided by the claim is not adequately enabled by the description of the invention provided in the specification of the application; this includes, of course, providing sufficient reasons for doubting any assertions in the specification as to the scope of enablement. In re Wright, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993). The Examiner has not met his burden of proof to provide a reasonable basis to question the enablement provided for the claimed invention. See MPEP 2164.01 and 2164.04. The Examiner has not set forth how one of ordinary skill in the art would require "undue experimentation" to practice Applicants' claimed

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invention. Further, Applicants are not limited by the presentation of preferable embodiments.

Applicants respectfully submit that there is ample guidance in Applicants' specification for one skilled in the relevant art to make and/or use the claimed invention without undue experimentation.

Additionally, Applicants' position remains as set forth in Section II of the Amendment dated March 22, 2001. Applicants respectfully submit that the Examiner has not addressed or responded to Applicants' arguments. Applicants' respectfully request that the Examiner respond to Applicants' arguments and issue an office action that is complete. See 37 C.F.R. §1.104(b).

III. The Rejection Under 35 U.S.C. §112, Second Paragraph

Claims 2, 4, 13, 14 and 18 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite.

A. The Examiner's Position

The Examiner states that claims 2, 4, 13 and 14 "appear to be duplicate claims."

The Examiner also states that claim 18 "depends from a later claim which is not proper."

Applicants respectfully submit that the present claims are clear and definite as written and that they particularly point out and distinctly claim the subject

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matter which Applicants regard as the invention. Applicants request that the Examiner reconsider and withdraw the rejection under 35 U.S.C. §112, second paragraph, in view of the following remarks.

Claim 4 has been cancelled.

As to claims 13 and 14, claim 13 recites three choices for the polyhydric alcohol forming the compound A: tetramethylolmethane, trimethylolpropane or polymers of these compounds. Claim 14 recites two choices for the polyhydric alcohol: trimethylolpropane or a dimer of tetramethylolmethane. Thus the subject matter of claims 13 and 14 are different.

As to claim 18 being dependent on a later claim, that is true, but the situation arose due to an amendment to the claims. Often during prosecution the claims numbering becomes different than that required for originally presented claims. One frequent example of such an occurrence is when independent claim 1 is canceled and a new independent claim is added. The claim number of the new claim must be the number following the last pending claim. The pending claims are then amended to depend from the new independent claim, which necessarily has a higher claim number. Upon allowance the Examiner renumbers the claims. See 37 C.F.R. §1.126 and MPEP §1302.01.

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For the above reasons, it is respectfully submitted that Applicants' claims are clear and definite and it is requested that the rejection under 35 U.S.C. §112 be reconsidered and withdrawn.

IV. The Art Rejections

Claims 1, 16, 17, 18 and 19 are rejected under 35 U.S.C. §102(b) or (e) as allegedly anticipated by or, in the alternative, under 35 U.S.C. §103(a) as allegedly obvious over EP070143 or J09151279.

Claims 9-15 and 20 are rejected under 35 U.S.C. §102(e) as allegedly anticipated by or, in the alternative, under 35 U.S.C. §103(a) as allegedly obvious over Blok et al.

Claims 2-8 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over EP 070143 or J09151279 taken in view of Blok et al.

Applicants respectfully submit that the present invention is not anticipated by or obvious over EP '143, JP '279 and Blok, either alone or in combination, and request that the Examiner reconsider and withdraw this rejection in view of the following remarks.

Claim 1 has been amended to depend on claim 2. Therefore, the §102/103 rejections based on EP070143 or J09151279 are moot (claim 2 was not rejected based on EP070143 or J09151279).

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Claims 9-15 have been amended to depend on claim 2. Therefore, the §102/103 rejections based on Blok et al are moot (claim 2 was not rejected based on Blok et al).

Applicants' invention of claim 2 recites the combined use of sodium 1,6-hexamethylenedithiosulfate dihydrate (HTS) and a compound A having two or more ester groups in one molecule, is well highlighted. Applicants respectfully submit that Applicants' claims are patentably distinct from the disclosures of the cited references, JP-A 09151279, EP 070143 and Block et al.

As explained in further detail in the Amendment filed March 22, 2001, none of the cited references disclose or even suggest the combined use of HTS and the compound A in a rubber composition as defined by claim 2. Additionally, none of the cited references disclose or even suggest the unexpected and beneficial effects obtained when the claimed rubber composition is utilized in, for example, tires.

Further, none of these references teach or disclose utilizing a rubber composition, in which HTS is compounded, in side reinforcing layers or bead fillers of a tire as defined by the present claims 16-21. It is noted that Japan '279 only suggests using their compositions in a tire tread. Additionally, none of the cited references disclose or even suggest the unexpected and beneficial effects obtained when such a HTS-compounded rubber composition is used in side reinforcing layers or bead fillers of a tire. On the other hand, the present application clearly

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demonstrates, in the examples and comparative examples of the specification, the unexpected and excellent effects obtained by applying a HTS-compounded rubber composition to side reinforcing layers or bead fillers of a tire. Therefore, Applicants respectfully submit that the claimed invention is patentably distinct from the references of the rejections.

For the above reasons, it is respectfully submitted that the subject matter of claims 1-3, 5-8 and 10-21 is neither taught by nor made obvious from the disclosures of EP '143, JP '279 and Blok, either alone or in combination, and it is requested that the rejections under 35 U.S.C. §§102 and 103 be reconsidered and withdrawn.

V. Conclusion

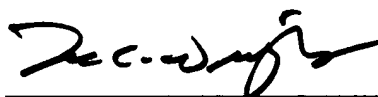
In view of the above, Applicants respectfully submit that their claimed invention is allowable and ask that the rejections under 35 U.S.C. §112 and the rejections under 35 U.S.C. §§102 and 103 be reconsidered and withdrawn. Applicants respectfully submit that this case is in condition for allowance and allowance is respectfully solicited.

If any points remain at issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the local exchange number listed below.

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Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Lee C. Wright", is written over a horizontal line.

Lee C. Wright
Registration No. 41,441

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: December 13, 2001

APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 4 and 9 are canceled.

The claims are amended as follows:

1 (Twice Amended). A rubber composition according to claim 2, wherein it has [comprising sodium 1,6-hexamethylenedithiosulfate dihydrate, and having], in a curve exhibiting a change in dynamic storage modulus during elevation of temperature, an intersection of an extrapolation line A of a portion in which the dynamic storage modulus shows an approximately linear change before a rapid decrease at temperatures higher than 100°C and an extrapolation line B of a portion in which the dynamic storage modulus rapidly decreases, at a temperature of 170°C or higher.

8. A rubber composition according to claim [4] 2, wherein the amount of the compound A is 0.5 to 20 parts by weight per 100 parts by weight of a rubber component.

10 (Twice Amended). A rubber composition according to claim [9] 2, having, in a curve exhibiting a change in dynamic storage modulus during elevation of temperature, a difference $\Delta E'$ between the maximum value and the minimum value of the dynamic storage modulus at a temperature between 180 and 200°C of 2.5 MPa or less.

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11 (Amended). A rubber composition according to claim [2] 10, wherein the compound A is an acrylate or a methacrylate.

12 (Twice Amended). A rubber composition according to claim [9] 2, wherein the compound A is a polyfunctional ester of a polyhydric alcohol and acrylic acid or methacrylic acid.

15 (Twice Amended). A rubber composition according to claim [9] 2, wherein the amount of the compound A is 0.5 to 20 parts by weight per 100 parts by weight of a rubber component.

16 (Twice Amended). A pneumatic tire according to claim 19, wherein the rubber composition has [comprising bead fillers and/or side wall portions reinforced with a rubber reinforcing layer, wherein the bead fillers and/or the rubber reinforcing layer comprises a rubber composition comprising sodium 1,6-hexamethylenedithiosulfate dihydrate, and has], in a curve exhibiting a change in dynamic storage modulus during elevation of temperature, an intersection of an extrapolation line A of a portion in which the dynamic storage modulus shows an approximately linear change before a rapid decrease at temperatures higher than 100°C and an extrapolation line B of a portion in which the dynamic storage modulus rapidly decreases, at a temperature of 170°C or higher.

17 (Twice Amended). A pneumatic tire according to claim 19, wherein the rubber composition has [comprising bead fillers and/or side wall portions reinforced

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with a rubber reinforcing layer, wherein the bead fillers and/or the rubber reinforcing layer comprises a rubber composition comprising], in a curve exhibiting a change in dynamic storage modulus during elevation of temperature, a difference $\Delta E'$ between the maximum value and the minimum value of the dynamic storage modulus at a temperature between 180 and 200 °C of 2.5 MPa or less.

Claims 21 is added as a new claim.